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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,532	01/20/2004	Jari Vallstrom	879A.0019.U1(US)	3289

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EXAMINER	
NGUYEN, TOAN D	

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/761,532	JARI VALLSROM	
	Examiner	Art Unit	
	Toan D. Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/20/04,6/28/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 3, and 6-9 are objected to because of the following informalities:

Claim 1 line 5, it is suggested to change "which method" to --- which said method ---.

Claim 3 line 2, it is suggested to change "the first VAD" to --- a first voice activity detection (VAD) ---. Similar problem exists in claim 8 line 3.

Claim 6 line 2, it is suggested to change "a voice sample" to --- said voice sample ---. Similar problems exist in claim 7 line 2, claim 8 line 2, and claim 9 line 2.

Claim 6 line 2, it is suggested to change "a packet" to --- said packet ---. Similar problems exist in claim 6 line 4, line 7, and line 11.

Claim 6 line 8, it is suggested to change "a VAD indication" to --- said voice activity detection (VAD) indication ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the same transmission channel" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the available transmission capacity" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 line 7, it is unclear as to what is meant by "at least one whole voice block is stolen and the saved number of bits is used for transmitting the header field data of the same packet." The scope of the claim is, therefore, unascertainable.

Claim 4 recites the limitation "the voice packet" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the number of bits" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "said saved bits" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 line 3, it is unclear as to what is meant by "a means for using said saved bits for transmitting header field data of the same packet." The scope of the claim is, therefore, unascertainable.

Claim 9 recites the limitation "the bit rate" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 line 1, it is unclear as to what is meant by "Software means stored on a terminal in a cellular network which software means". The scope of the claim is, therefore, unascertainable.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hluchyj et al. (US 5,115,429) in view of Song (US 6,240,299).

As far as understood with respect to claims 1, 3 and 4, Hluchyj et al. disclose dynamic encoding rate control minimizes traffic congestion in a packet network where both voice sample packets and associated header fields are transmitted in real time in one and the same transmission channel, in which method, if a combined bit count in the voice sample of a packet and in the header field is estimated to exceed the available transmission capacity of the transmission channel (col. 1 lines 25-27).

However, Hluchyj et al. do not expressly disclose the number of bits in the voice sample is reduced or at least one whole voice block is stolen and the saved number of bits is used for transmitting the header field data of the same packet. In an analogous art, Song discloses the number of bits in the voice sample is reduced or at least one whole voice block is stolen and the saved number of bits is used for transmitting the header field data of the same packet (col. 3 lines 55-58).

Song discloses wherein a voice sample replacement is performed when no more than 500 ms have passed from the first VAD included in the same speech spurt (col. 4 lines 39-40 as set forth in claim 3), and wherein the reduction of the number of bits in the voice sample is performed by replacing the contents of the voice packet with a NO DATA block (col. 4 lines 39-40 as set forth in claim 4).

One skilled in the art would have recognized the number of bits in the voice sample is reduced or at least one whole voice block is stolen and the saved number of bits is used for transmitting the header field data of the same packet, and would have applied Song's encoding/decoding for a cellular radiotelephone in Hluchyj et al.'s speech activity detection. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Song's cellular radiotelephone having answering machine/voice memo capability with parameter-based speech compression and decompression in Hluchyj et al.'s dynamic encoding rate control minimizes traffic congestion in a packet network with the motivation being to reduce the storage space required for the parameter code (col. 3 lines 57-58).

For claim 2, Hluchyj et al. disclose wherein the reduction of the number of bits in the voice sample is performed only for packets transmitted at the beginning of a speech spurt (col. 1 lines 25-27).

As far as understood with respect to claim 5, Hluchyj et al. disclose dynamic encoding rate control minimizes traffic congestion in a packet network comprises a means for the number of bits in a voice sample included in a packet to be transmitted (col. 3 lines 59-61). However, Hluchyj et al. do not expressly disclose reducing the

number of bits and a means for using said saved bits for transmitting header field data of the same packet. In an analogous art, Song discloses reducing the number of bits and a means for using said saved bits for transmitting header field data of the same packet (col. 3 lines 55-58).

Song discloses wherein the means for reducing the number of bits in a voice sample are arranged so as to perform a replacement when no more than 500 ms have passed from the first VAD included in the same speech spurt (col. 4 lines 39-40 as set forth in claim 8), wherein the means for reducing the number of bits in a voice sample, the bit rate and frame count calculation block is arranged so as to replace the contents of the voice packet with a NO_DATA block (col. 4 lines 39-40 as set forth in claim 9), and software means stored on a terminal in a cellular network (col. 4 lines 47-50 as set forth in claims 10 and 11).

One skilled in the art would have recognized the reducing the number of bits and a means for using said saved bits for transmitting header field data of the same packet, and would have applied Song's encoding/decoding for a cellular radiotelephone in Hluchyj et al.'s speech activity detection. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Song's cellular radiotelephone having answering machine/voice memo capability with parameter-based speech compression and decompression in Hluchyj et al.'s dynamic encoding rate control minimizes traffic congestion in a packet network with the motivation being to reduce the storage space required for the parameter code (col. 3 lines 57-58).

For claim 6, Hluchyj et al. disclose wherein the means for reducing the number of

bits in a voice sample included in a packet to be transmitted and means for using said saved bits for transmitting header field data of the same packet comprise:

- a voice coder for converting a voice sample into a bit combination and for producing a VAD indication (col. 4 lines 49-50),

- a bit rate and frame count calculation block for calculating the combined bit count for bits in the bit combination transmitted in a packet and bits in the header field after a VAD indication (col. 4 lines 33-35),

- a frame stealing decision block for making a frame stealing decision based on the calculation result from the bit rate and frame count calculation block (col. 5 lines 25-31), and

- a RTP block generation and frame stealing block for replacing in a packet to be transmitted, subsequent to the frame stealing decision, bits in the bit combination produced from the voice sample (col. 5 lines 25-31).

For claim 7, Hluchyj et al. disclose which comprises a means for reducing the number of bits in a voice sample only for packets transmitted at the beginning of a speech spurt (col. 1 lines 25-27).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN

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